## Meeting Notes

# CALFED BAY-DELTA PROGRAM NORTH DELTA IMPROVEMENTS GROUP

Thursday, January 9, 2002 at 9:30 a.m. at the Resources Building

#### **ATTENDANCE LIST:**

Paul Bowers USACE Sacramento District Robert Clark North Delta Water Agency

Gilbert Cosio MBK Engineers
Craig Crouch County of Sacramento

Patricia Fernandez CALFED
Sam Garcia Jones & Stokes
Dan Gwaltney County of Sacramento

Walter Hoppe Point Pleasant

Chris Kimball DWR

Bill Kirkham

Gwen Knittweis DWR North Delta

Eddie Lucchesi San Joaquin County Mosquito and Vector Control

Sara Martin Jones & Stokes Ron Ott CALFED

Sam Sharideh San Joaquin County Public Works

Craig Stevens Jones & Stokes
Don Trieu MBK Engineers
Chuck Voglesang CALFED

Keith Whitener The Nature Conservancy

Collette Zemitis DWR

April Zohn Jones & Stokes

#### **HANDOUTS**

- Meeting Agenda
- Ecosystem Restoration Program Announcement
- PowerPoint Slides: Hydraulic Analysis of Preliminary Flood Control Components

## 1. INTRODUCTIONS AND WELCOME – Gwen Knittweis, DWR

Gwen Knittweis opened the meeting by welcoming everyone back to the NDIG after a break in December.

### 2. NORTH DELTA PROJECT UPDATE – Gwen Knittweis, DWR

- **Schedule**: Although the public scoping dates have been postponed, the environmental compliance portion of the project is still on target as far as the overall schedule goes (the most recent schedule can be found on the North Delta project website, <a href="http://www.mcwatershed.org/NorthDelta/northdelta.html">http://www.mcwatershed.org/NorthDelta/northdelta.html</a>). In the original schedule, scoping was planned for January, but has now been postponed until February 19<sup>th</sup> and 20<sup>th</sup>. The public draft of the EIR is still expected to be ready this summer.
- **Federal Lead Agency**: The US Army Corps of Engineers Planning Division is close to being on board as the North Delta project's federal lead agency. The project team counted a victory on this front when the Reclamation Board gave the OK in December to expand their feasibility study, the Delta Special Study, to include the North Delta project. The Corps is currently

drafting a PMP (Project Management Plan) management document. Bringing Corps Planning on board will provide a Federal Lead Agency and may make the project eligible for Federal implementation funding.

- Alternatives Analysis: Preliminary flood control components are being analyzed using the HECRAS model, and early peer review results are coming in. The HEC-RAS model technology is gaining increased credibility, as Bill Fleenor of UC Davis has done an independent review of it and intends to publish his findings. In addition to the hydraulic modeling, the project team is working with the Corps to do a cost-benefit analysis of alternatives to optimize the integration of flood control and ecosystem restoration components. Background research for the EIR has begun, and the ASIP is well underway, with the committee still working to finish it.
- **Restoration**: Collette Zemitis will be presenting the proposed McCormack-Williamson Tract demonstration project at the CALFED Science Conference the week of January 13. Collette presented the concept behind this project to the joint meeting of the NDIG and NDAT on November 5, 2002.
- **ERP Announcement**: Collette announced that the CALFED Ecosystem Restoration Program's draft document on Delta Regional Area Land Use Designations and Ownership is now online (<a href="http://calfed.ca.gov">http://calfed.ca.gov</a>) and comments are being accepted until March 1, 2003.

#### 3. SUMMARY OF HYDRAULIC MODELING RESULTS – Don Trieu, MBK

Gwen introduced the topic of hydraulic modeling, explaining that the North Delta project team is in the early planning stages of the project, gathering information as well as using the hydraulic model to isolate and analyze the effectiveness of individual flood control components. The initial review of flood control components has been completed. During the next round of hydraulic modeling, combinations of components will be assessed as to their effect on flooding in the delta. Gwen reminded that group that the planning process for well-integrated flood control and ecosystem restoration is an iterative one and the components will be further refined to maximize ecosystem restoration benefits.

Don Trieu then gave a PowerPoint presentation on the results of the hydraulic analysis preliminary flood control components. The ultimate goal of this round of hydraulic modeling was for the project team to develop information and further their understanding of the conceptual flood control alternatives in order to bring a fair amount of detail to the public scoping meetings at the end of February. The initial modeling runs analyzed 11 separate flood control components (components will eventually be combined to form conceptual alternatives). Following runs will include modified components, combinations of components, and Mike11 runs to assess ecosystem restoration potential of the components.

The 11 components modeled in this run included variations on Staten Island flood detention, McCormack-Williamson Tract flood detention, Dead Horse Island flood detention, setback levees, and channel dredging. Approximately 100 simulation runs were tested, with variations in weir length and elevation, setback distance, and whether or not certain levees failed.

The results were calculated with a 0.1 foot margin of error, and showed overall low impact in the central delta, with mainly localized impacts on flood stage, however, combinations of components may show otherwise. The model results also showed that components both upstream and downstream of New Hope marina must be combined for successful flood water conveyance.

The next steps for hydraulic modeling include additional modeling of component combinations and modified components, review of components for integrated ecosystem restoration potential, and formulation of conceptual alternatives to take to public scoping.

Gwen pointed out that the project team is working on some additional modeling (MIKE11 and possibly DSM2) to assess potential benefits to other CALFED goals, like ecosystem restoration and water quality.

At this point, the North Delta project team received input and fielded questions from the NDIG. A meeting attendee asked if a data point could be added to the model in the Dry Creek area. Don answered that the data point at Benson's Ferry is a pretty good indication of what's going on in Dry Creek. At this point, the model isn't seeing much impact at Benson's Ferry with the current concepts, but when the model starts to show impacts at Benson's Ferry, the team will take a closer look at how far up Dry Creek those impacts reach.

Another attendee asked whether Through-Delta Facility/Delta Cross Channel (DCC) operations were being taken into account in the model runs. Ron Ott answered that during flood events, the DCC would not be in operation.

A concern about inducing population growth by lowering flood stage in the Franklin Pond area was expressed, and Craig Crouch pointed out that the project is designed to address current residents' need for flood control. There aren't many lands in the area that are not controlled by either the County or the Nature Conservancy, so population growth should not really be an issue. Paul Bowers mentioned that the project team may look into zoning protection for the area so it will not be developed.

#### 4. NORTH DELTA HYDROLOGY APPROACH – Chris Kimball, DWR

Chris Kimball, an engineer on the North Delta project team, then gave a PowerPoint presentation on the North Delta hydrology approach, which is an undertaking still in progress. The purpose of developing hydrology for the 5, 10, 50, 100, and 200-year flood events is to input these flood events into the model and use the output in the alternative optimization process.

The North Delta project is intended to positively impact the entire North Delta, but the solution area (the area where flood control improvements will actually be made) is somewhat smaller. At the central point of the solution area sits the New Hope Gage, and this gage will be used as the key event barometer, meaning that the modeled flood events should coincide with the corresponding stages at the New Hope Gage.

The preferred method of flow hydrograph development is to use historical data for the calculations, with synthetic data (developed by means of ratioing from gage info, basin size, etc) when historical data is not available. For the stage hydrograph, the preferred method of hydrology development utilizes existing stage-frequency curves from the Delta Special Study, but for locations where that is not available, historical data and a best-fit curve will be used.

Bob Collins of USACE and Herb Hereth of DWR Flood Management, expert hydrologists, will assist in the selection of the design hydrograph, which will be developed using the flow-frequency and stage-frequency curves.

Don Trieu explained to the group that this hydrology will be used in the analysis of the three projects financing the model (for SAFCA, Sacramento County, and DWR). An NDIG attendee recommended making sure all stakeholders were satisfied with the hydrology. Craig Crouch concurred that the hydrology being developed by DWR should be reviewed by the other two agencies (Sacramento County and SAFCA) and that David Ford would be an appropriate person to review it on their behalf. He believed that Grant Kreinberg would also concur on this matter.

#### 6. **NEXT MEETING**

The next NDIG meeting is scheduled for 9:30-11:30 a.m. on **Thursday, February 13, 2003**, at Jones & Stokes, 2600 V Street.